Remarks/Arguments

The present amendment cancels 1-21, 23, and 25-28; and adds new claims 29-41. The amendment is without prejudice to future prosecution.

New claims 29-41 focuses on a preferred embodiment referenced in the application on page 13, lines 3-11 and in the original claims. Support for the new claim 29 is provided in the original claims, for example, as follows: original claim 1 provides X^{10} except for the omission of alanine; original claim 2 provides different X^6 groups; original claim 6 provides different X^{17} groups; original claim 10 provides X^8, X^9, and X^{11}-X^{15}; and original claim 14 provides X^7 and X^{16}. Dependent claims 30-41 are further supported, for example, by original claims 3, 4, 11, 13, and 17-20.

The description of the labeled derivative provided in canceled claim 1, was replaced in claim 29 by indicating that a substituent on the peptide is optionally substituted with a detectable label. Because the base description of peptide was changed, reference to labeled derivative with respect to a salt is redundant and was not provided in claim 29. Support for the label description is provided, for example, by reference in original claim 1 to "optionally substituted" and the description of detectable labels provided in the application on page 12, line 32 to page 13, line 2.

Restriction Requirement

The examiner maintained the restriction requirement. The examiner also indicated that while SEQ ID NOs: 29-34 are patentably distinct, SEQ ID NOs: 30-34 would be examined with the elected SEQ ID NO: 29. Applicant appreciates the examination of the additional sequences in the present application.

35 U.S.C. § 101 (Non-Statutory Subject Matter)

Claims 1-18 stand rejected as allegedly directed to products of nature. The rejection is respectfully traversed.

The peptide described in claims 1-18 and the new claims are not believed to be naturally occurring. The peptide differs from naturally occurring MCH is several respects including the X^6.

35 U.S.C. § 112 (Enablement)

Claims 1-16, 19 and 20 were rejected as allegedly not enabled. The rejection argues that a large number of peptides are encompassed by the claims and the specification fails to provide working examples of derivatives, higher homologs, or labels. The rejection is respectfully traversed.

Claims 1-16, 19 and 20 were canceled without prejudice to future prosecution and replaced with new claims 29-41. Enablement of the new claims is provided by the guidance in the application concerning different modifications to an MCH analog and the effect of such modifications on analog activity at MCH-1R and MCH-2R. (See the present application at pages 24-30.) The different analogs illustrate a core structure and variations to a core structure useful in providing selective MCH-1R activity.

The examples in the application concerning different modifications to MCH analogs also illustrates techniques that can be employed to confirm the activity of a particular analog at the MCH receptor. Confirmation of analog activity involves routine experimentation.

The core structure and variations to the structure provides a framework for substituting with a detectable label. The framework provides for activity at the MCH receptor. The detectable label is provided to produce a detectable signal. At the time the application was filed detectable labels were well known in the art. The effect of a particular label on analog activity at MCH-1R and MCH-2R can be confirmed by routine experimentation.

35 U.S.C. § 112 (Written Description)

Claims 1-16, 19 and 20 were rejected as allegedly not complying with the written description requirement. The rejection argues that the application lacks sufficient description of structure to function/activity and representative species to sufficiently describe the claimed invention such that skilled artisan would recognize applicant possessed the claimed invention. The rejection is respectfully traversed.

Claims 1-16, 19 and 20 were canceled without prejudice to future prosecution and replaced with new claims 29-41. Written description is provided by the structural descriptions of the peptide analogs along with knowledge well known in the art concerning detectable labels.

The application describes a core structure and variations to the structure that provides a framework for substituting a provided analog with a detectable label. The framework provides for activity at the MCH receptor. The detectable label is provided to produce a detectable signal. At the time the application was filed detectable labels were well known in the art. Examples of such labels noted by the application include luminescent, enzymatic, and a radiolabel. (See for example, the present application at page 12, line 32 to page 13, line 2.)

35 U.S.C. § 112 (Definiteness)

Claims 1-16, 19 and 20 were rejected as allegedly indefinite. The rejection is directed to reference in the claims to "a derivative thereof", "a labeled derivative" and "higher homolog", and as to how a compound able to bind MCH-1R is identified.

Claims 1-16, 19 and 20 were canceled without prejudice to future prosecution and replaced with new claims 29-41. The new claims do not reference "a derivative thereof" or a "higher homolog".

The new claims also do not use the phrase "a labeled derivative", but provide for the same meaning by reference to "optionally substituted with a detectable label". The present application on page 12, line 33-34 provides that a labeled derivative indicates a detectable label and include examples of detectable labels.

New claim 40 is similar to canceled claim 19, but indicates measuring the ability of the compound to "inhibit" binding.

35 U.S.C. § 103 (Obviousness)

Claims 1 and 2 were rejected as allegedly obvious based on Maratos-Flier et al. (U.S. Patent No. 5,849,798). The rejection is respectfully traversed.

Claims 1 and 2 were canceled without prejudice to future prosecution. New claim 29 differs from Maratos-Flier et al. for example, by the provided description for X^6 in combination with X^{10}. X^6 in claim 29 has a different generic scope than provided for in Maratos-Flier et al. at column 19, lines 51-52. X^{10} in claim 29 does not list Gly as provided in Maratos-Flier et al. at column 20, line 7, and does not list Ala as X^{10}. Ala is indicated in Maratos-Flier et al. to be a conservative substitution for Gly. (Maratos-Flier et al. at column 36, Table 1.)

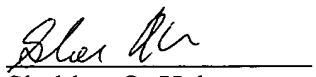
Provisional Obvious Type Double Patenting

Several commonly owned applications directed to different MCH peptide agonists or antagonists are pending: Application No. 10/182,509 (the '509 application), Application No. 10/477,985 and Application No. 10/485,682. The '509 application is cited in the provided provisional obviousness type double patenting rejections. Claims 1-3, 5-11, 14, 15 and 17-20 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting based on claims 22-30, 34-37, 42 and 43 of the '509 application. The rejection is respectfully traversed.

Claims 1-3, 5-11, 14, 15 and 17-20 were cancelled without prejudice to future prosecution. In addition, applicants note that prosecution of the present application and the '509 is ongoing.

Please charge deposit account 13-2755 for fees due in connection with this amendment. If any time extensions are needed for the timely filing of the present amendment, applicant petitions for such extensions and authorize the charging of deposit account 13-2755 for the appropriate fees.

Respectfully submitted,

By 

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